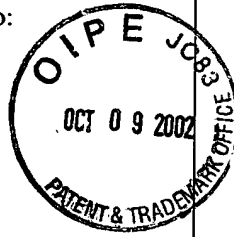


I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to:

Assistant Commissioner for Patents  
Washington, D.C. 20231-0001

On: October 3, 2002

By *Diana M. Schaller*  
Diana M. Schaller



Attorney Docket No.: 0176.310US  
(formerly 18097A-033520US)

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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of:

Stanley Goldman, *et al.*

Application No.: 10/028,247

Filed: December 19, 2001

For: **METHODS AND COMPOSITIONS  
FOR DEVELOPING SPORE DISPLAY  
SYSTEMS FOR MEDICINAL AND  
INDUSTRIAL APPLICATIONS**

Examiner: Unassigned

Art Unit: 1651

**INFORMATION DISCLOSURE  
STATEMENT UNDER 37 CFR § 1.56,  
§1.97 AND §1.98**

Assistant Commissioner of Patents  
Washington, D.C. 20231-0001

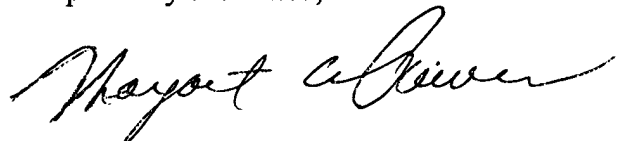
Sir:

The references cited on attached form PTO/SB/08A-B are being called to the attention of the Examiner to make of record the references cited in parent application USSN 09/892,208 filed June 26, 2001. Also enclosed are copies of the International Search Report and International Preliminary Examination Report corresponding to the related PCT application. It is respectfully requested that the cited information be expressly considered during the prosecution of this application and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom. Pursuant to 37 CFR § 1.98(d), copies of references cited in parent application USSN 09/892,208 are not provided. However, Applicants will gladly provided fresh copies of any references requested by the Examiner.

As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art or is, or is considered to be, material to patentability merely because they are in this statement and no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

This Information Disclosure Statement is being filed before the mailing of the first Office Action after the filing of a request for continued prosecution examination. Applicants believe that no fee is required for submission of this statement, since it is being submitted prior to the first Office Action. However, if a fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 50-0990. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Margaret A. Powers".

Margaret A. Powers  
Reg. No. 39,804

Maxygen, Inc.  
515 Galveston Drive  
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Telephone: 650-298-5300  
Facsimile: 650-298-5446

Substitute for form 1449A-B/PTO

**SUPPLEMENTAL INFORMATION  
DISCLOSURE STATEMENT BY  
APPLICANT**

(use as many sheets as necessary)

**Complete if Known**

Application Number	10/028,247
Filing Date	December 19, 2001
First Named Inventor	Stanley Goldman
Group Art Unit	1651
Examiner Name	Unassigned
Attorney Docket Number	0176.310US (formerly 18097A-033520US)

**U.S. PATENT DOCUMENTS**

Examiner Initials	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code (if known)			
	1	5,837,500		Ladner, <i>et al.</i>	11/17/1998	<b>RECEIVED</b>  OCT 11 2002  TECH CENTER 1600/2900
	2	5,800,821		Acheson, <i>et al.</i>	09/01/1998	
	3	5,766,914		Deits	06/16/1998	
	4	5,663,143		Ley, <i>et al.</i>	09/02/1997	
	5	5,348,867		Georgiou, <i>et al.</i>	09/20/1994	
	6	5,223,409		Ladner, <i>et al.</i>	06/29/1993	

**FOREIGN PATENT DOCUMENTS**

Examiner Initials	Cite No.	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
		Office	Number	Kind Code (if known)				
	6	WO	01/94599	A1	Smittskyddsinstitutet	12/13/2001		
	7	WO	99/41368		Maxygen, Inc.	08/19/1999		
	8	WO	95/19371		Solvay	07/20/1995		

**OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS**

Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T
	9	ARONSON, A.J., <i>et al.</i> , "Gene structure and precursor processing of a novel <i>Bacillus subtilis</i> spore coat protein", <i>Molecular Microbiology</i> 3(3): 437-444 (Aug. 1989).	
	10	BOURNE, Nigel, <i>et al.</i> , "Structural and Germination Defects of <i>Bacillus subtilis</i> Spores with Altered Contents of a Spore Coat Protein", <i>Journal of Bacteriology</i> 173(20): 6618-6625 (Oct. 1991)	
	11	CUTTING, Simon, <i>et al.</i> , "Gene Encoding Two Alkali-Soluble Components of a Spore Coat from <i>Bacillus subtilis</i> ", <i>Journal of Bacteriology</i> 173(9): 2915-2919 (May 1991).	
	12	DONOVAN, William, <i>et al.</i> , "Genes Encoding Spore Coat Polypeptides from <i>Bacillus subtilis</i> ", <i>Journal of Molecular Biology</i> 196: 1-10 (1987).	
	13	ESSER, Dirk, <i>et al.</i> , "The HU Protein from <i>Thermotoga maritima</i> : Recombinant Expression, Purification and Physicochemical Characterization of an Extremely Hyperthermophilic DNA-binding Protein", <i>Journal of Molecular Biology</i> 291: 1135-1146 (1999).	
	14	GOLDMAN, Robert C., <i>et al.</i> , " <i>Bacillus subtilis</i> Spore Coats: Complexity and Purification of a Unique Polypeptide Component", <i>Journal of Bacteriology</i> 135(3): 1091-1106 (Sept. 1978).	

Examiner Signature	Date Considered
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Attorney Docket Number	0176.310US (formerly 18097A-033520US)

**OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS**

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|----|---|
| 15 | HENRIQUES, Adriano O., et al., "Characterization of <i>cotJ</i> , a $\sigma^E$ -Controlled Operon Affecting the Polypeptide Composition of the Coat of <i>Bacillus subtilis</i> Spores", <i>Journal of Bacteriology</i> 177(12): 3394-3406 (June 1995).   |
| 16 | HILL, P.J., et al., "Bioluminescence and spores as biological indicators of inimical processes", <i>Journal of Applied Bacteriology Symposium Supplement</i> 76: 129S-134S (1994).  |
| 17 | IVINS, Bruce, et al., "Experimental anthrax vaccines: efficacy of adjuvants combined with protective antigen against an aerosol <i>Bacillus anthracis</i> spore challenge in guinea pigs", <i>Vaccine</i> 13(18): 1779-1784 (1995).   |
| 18 | IVINS, Bruce E., et al., "Immunization against Anthrax with Aromatic Compound-Dependent ( <i>Aro</i> <sup>-</sup> ) Mutants of <i>Bacillus anthracis</i> and with Recombinant Strains of <i>Bacillus subtilis</i> that Produce Anthrax Protective Antigen", <i>Infection and Immunity</i> 58(2): 303-308 (Feb. 1990). |
| 19 | IVINS, Bruce, et al., "Cloning and Expression of the <i>Bacillus anthracis</i> Protective Antigen Gene in <i>Bacillus subtilis</i> ", <i>Infection and Immunity</i> 54(2): 537-542 (Nov. 1986).   |
| 20 | ISTICATO, Rachele, et al., "Surface Display of Recombinant Proteins on <i>Bacillus subtilis</i> Spores", <i>Journal of Bacteriology</i> 183(21): 6294-6301 (Nov. 2001).   |
| 21 | KUNST, F., et al., "The complete genome sequence of the Gram-positive bacterium <i>Bacillus subtilis</i> ", <i>Nature</i> 390(20): 249-256 (Nov. 1997).   |
| 22 | McBRIDE, B.W., et al., "Protective efficacy of a recombinant protective antigen against <i>Bacillus anthracis</i> challenge and assessment of immunological markers", <i>Vaccine</i> 16(8): 810-817 (1998).   |
| 23 | NACLERIO, G., et al., " <i>Bacillus subtilis</i> Spore Coat Assembly Requires <i>cotH</i> Gene Expression", <i>Journal of Bacteriology</i> 178(15): 4375-4380 (Aug. 1996).  |
| 24 | PARK, Sukjoon, et al., "Optimized Production and Purification of <i>Bacillus anthracis</i> Lethal Factor", <i>Protein Expression and Purification</i> 18:293-302 (2000).  |
| 25 | SETLOW, Peter, "Spore Structural Proteins." In.: Abraham L. Sorenshein JAH, Richard Losick, editor. <i>Bacillus Subtilis and Other Gram Positive Bacteria</i> . Biochemistry, Physiology, and Molecular Biology: The American Society for Microbiology, pp. 801-809.  |
| 26 | SINGH, Manmohan. et al., "Cationic microparticles: a potent delivery system for DNA vaccines," <i>Proc. Natl. Acad. Sci.</i> 97(2): 811-16 (Jan. 18, 2000).   |
| 27 | SYKES, Kathryn F., et al., "Linear expression elements: a rapid, in vivo, method to screen for gene functions", <i>Nature Biotechnology</i> 17: 355-359 (April 1999).   |
| 28 | WEBB, Chris D., et al., "Use of Green Fluorescent Protein for Visualization of Cell-Specific Gene Expression and Subcellular Protein Localization during Sporulation in <i>Bacillus subtilis</i> ", <i>Journal of Bacteriology</i> 177(20): 5906-5911 (Oct. 1995).  |

Examiner  
Signature

Date  
Considered

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<b>Substitute for form 1449A-B/PTO</b>  <b>SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>	<b>Complete if Known</b>	
	Application Number	<b>10/028,247</b>
	Filing Date	<b>December 19, 2001</b>
	First Named Inventor	<b>Stanley Goldman</b>
	Group Art Unit	<b>1651</b>
	Examiner Name	<b>Unassigned</b>
	Attorney Docket Number	<b>0176.310US (formerly 18097A-033520US)</b>

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS		
29	ZHANG, Jianke, <i>et al.</i> , "Cloning and Characterization of a Cluster of Genes Encoding Polypeptides Present in the Insoluble Fraction of the Spore Coat of <i>Bacillus subtilis</i> ", <i>Journal of Bacteriology</i> 175(12): 3757-3766 (June 1993).	
30	ZHENG, Liangbiao, <i>et al.</i> , "Gene encoding a morphogenic protein required in the assembly of the outer coat of the <i>Bacillus subtilis</i> endospore", <i>Genes &amp; Development</i> 2: 1047-1054 (1988).	

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